



MM[®] VCS Series Expansion Joint

Vertical Rubber Compression Seal System

SPECIFIC DATA
 MM Systems Corp. • 50 MM Way, Pendergrass, GA 30567 • 866.506.6929 • www.mmsystems.com

DESCRIPTION

VCS Series expansion joint is a continuous multi-web vertical Elastoprene[®] compression seal that is available in a wide array of colors. The VCS remains in compression throughout its entire movement cycle. It is bonded in place using a polyurethane adhesive creating a weather tight seal in vertical joint openings.

BASIC USE

VCS Series expansion joint is cost effective sealing system for vertical expansion joint openings in a wide variety of buildings and concrete structure applications – EFIS, brick, block, window-walls, metal panels and the like.

FEATURES

- No mechanical anchors or metal components.
- Multi-web rubber seal profile accommodates expansion and compression.
- Splices can be heat welded or bonded with specialty adhesive.
- Elastoprene rubber is available in colors.
- Low-pressure seal profile design for vertical applications.
- High abrasion and ultraviolet resistance.
- Cost effective and easy to install.

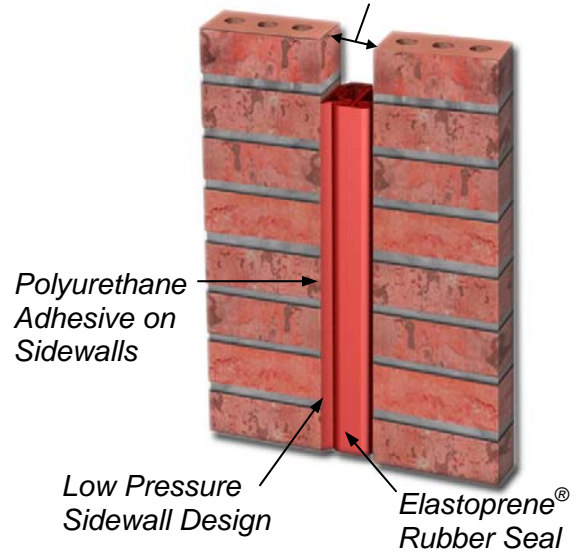
SPECIAL FEATURES

- Elastoprene[®] rubber designed specifically for expansion joints and enhanced durability.
- Fire Barriers - MM expansion joint systems are available with 2-4 hour fire protection ratings.

LIMITATIONS

- Joint opening substrate must be sound, dry, and free of any laitance, curing agents or foreign matter.
- Install temperature must be 40°F and rising.
- Compression seal must always remain in compression to perform properly.

Vertical Expansion Joint Opening



PACKAGING

Elastoprene[®] rubber seals are supplied in longest possible lengths shipped in cartons or pallets.

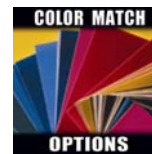
SM7108 Permthane Adhesive – one part polyurethane adhesive supplied in 20 oz. tubes.

STORAGE

All materials should be stored in a cool, dry location 60-80°F (15-27°C) prior to use.

COLOR OPTIONS

Available in black, gray, beige and custom colors.



PRECAUTIONS

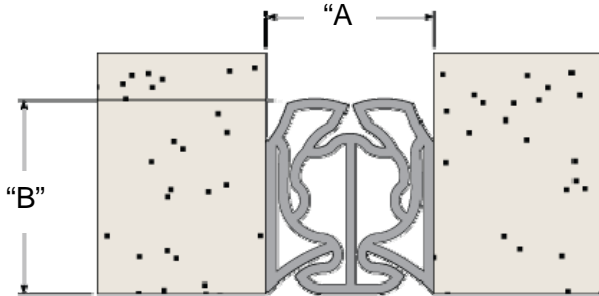
Use splash goggles and chemical resistant gloves to avoid prolonged or repeated skin contact with polyurethane adhesive. Use with adequate ventilation. In case of eye contact, immediately flush (low pressure) with lukewarm water. In case of skin contact, immediately wash skin with soap and water. If swallowed, do not induce vomiting. Call physician or poison control center. Read and follow labels and Material Safety Data Sheet before use.

MM Vertical Compression Seals

SELECTION GUIDE

Model Number	Total Movement		Joint Opening "A"						Installation Midpoint "A"		Seal Depth "B"	
			Minimum	Nominal	Maximum	Minimum	Nominal	Maximum				
VCS-175	3.50	89	0.50	13	1.00	25	1.50	38	1.00	25	1.55	32
VCS-225	2.50	64	0.63	16	1.32	33	2.00	51	1.32	33	4.00	39
VCS-300	3.50	89	0.63	16	1.69	43	2.75	70	1.70	43	2.25	57

Dimensions are in **inches** (bold) and millimeters. Depth "B" is at full compression.



Model VCS
(Wall-to-Wall)

PHYSICAL PROPERTIES

Physical Property	Test Method	Value
Elastoprene-100 Rubber		
Tensile Strength	ASTM D412	1000 psi
Ultimate Elongation	ASTM D412	445%
Hardness, Shore D	ASTM D2240	65 +/-3
Tear Strength @ 73°F (23°C)	ASTM D624	140 pli / 24.5 kN/m
Tear Strength @ 212°F (100°C)	ASTM D624	58 pli / 10.2 kN/m
Compression Set @ 168 hours	ASTM D395	25% @ 23°C / 73°F
Compression Set @ 168 hours	ASTM D395	38% @ 100°C / 212°F
Ozone Resistance	ASTM D1149	No Cracks
UV Resistance	ASTM D695	Very Good
Brittle Point	ASTM D746	-76°F (-60°C)

NOTE: The foregoing information is published as general information only. The listed properties and performance characteristics are approximate values while actual field results may vary.

LIMITED WARRANTY

MM Systems warrants the Vertical Compression Seals to be free of defects in material and conform to technical data listed. Since methods of application can affect performance and on site conditions are beyond our control, MM Systems makes no other warranty, expressed or implied, including warranties of MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. MM Systems sole obligation shall be, at its option, to replace, or to refund the purchase price of the quantity of system proved to be defective. In no event shall MM Systems be liable for any special, incidental, consequential, loss of profits or punitive damages. Other warranties may be available when installed by a MM® Certified Contractor.

INSTALLATION

- 1) Remove and repair all unsound substrate. Joint opening sidewall interface areas must be clean and dry prior to installation.
- 2) Prepare joint opening - surfaces must be sound, dry, by sandblasting free laitance, curing agents or foreign matter.
- 3) Uncoil seal and allow it to relax in the sun for as long as possible before installation.
- 4) Joint opening must be blown with compressed air immediately prior to seal installation.
- 5) Clean and prepare sidewalls of the seal and joint opening interface per the installation guidelines.
- 6) Apply a thin layer of the polyurethane lubricant adhesive to the sides of the seal (enough to fill the ribs) and to the sidewalls of the expansion joint opening.
- 7) Install the seal by pushing it into the joint opening with a blunt/flat metal bar.
- 8) Position seal according to dimensional guidelines.
- 9) Clean excess adhesive from seal and concrete.
- 10) Refer to VCS Installation Guide for detailed step-by-step instructions.

MM Systems reserves the right to amend or withdraw information contained herein, without notice, and will not be liable for any inaccuracy or ambiguity of said information.

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